

Landscape Institute Advice Note 01/09 Use of photography and photomontage in landscape and visual assessment

Background

Photographs and photomontages often form an important part of planning applications and Environmental Statements, and the portrayal of reliable visual information is integral to the assessment of landscape and visual effects. This Advice Note aims to encourage the use of methods which achieve acceptable levels of accuracy, replicability, transparency of process and openness to scrutiny. Photographic images alone cannot provide the visual experience that a human observer would receive in the field and should therefore be considered an aide-mémoire: detailed assessment and considered judgements can only be made on the basis of site inspection. This advice note supersedes Landscape Institute Advice Note 01/04.

General principles

The Landscape Institute (LI) recommends that visual representations should:

- be as geometrically accurate as possible, to permit decision-makers or their advisors make a reasonable, balanced decision or judgement, the decision making process for which should include inspection in the field;
- be based on a transparent, structured and replicable procedure, so that others can test and confirm the accuracy of what has been presented and thus establish trust;
- use techniques, with explanation, that best represent the scheme under consideration and the environment into which it is proposed to be set, in a fair and reasonable manner;
- be easily understood by the non-technical public.

Viewpoints

In using photography for assessment work, the landscape professional should, where possible, agree photographic viewpoints with the Regulatory Authority. These should be selected to be representative of the range of potential effects, ensuring that none are under- or over-represented. Some Regulatory Authorities may specify their own photographic requirements, in which case the landscape professional should give careful consideration as to whether the Regulatory Authority's requirements could under- or over-represent potential effects and either add these images to the assessment or omit to include them, explaining the reasons for the decision in the text. Wherever possible, cameras should be tripod mounted and levelled in horizontal and vertical axes. Where it has been necessary to raise or lower the horizon line artificially, this should be indicated.

Techniques selected can involve:

- including representation of both the baseline context as well as detailed montage illustration of the scheme;
- illustrating the scheme under different weather and lighting conditions;
- ensuring that an appropriate horizontal and vertical field of view is covered;
- considering whether to illustrate the proposed development as a stationary and/or moving form (in the case of schemes such as wind turbines).

It is not necessary to use all these approaches for every assessment. Instead the emphasis must be on the professional judgement of the assessor being used to make an appropriate selection depending upon what is important, without obfuscating the assessment with irrelevant detail.

Lenses

The LI endorses the use of a 'standard' 50mm focal length lens with a single lens reflex camera or its digital equivalent, but does not prescribe a single focal length of lens or camera format to be used for all occasions. Whilst the 'standard' 50mm lens will be suitable for most purposes, the most appropriate combination of lens, camera format and final presentation of image should be deployed to best represent the relevant landscape. The 'relevant landscape' is likely to include both the site where the scheme is proposed and its context, so that both a proposal's appearance and its place within its environment can be recognised and understood. The provision of information on the camera, lens, OS grid coordinates for the viewpoint, angle and direction of view, date, time, weather and lighting conditions is recommended, and where possible, the horizontal field of view should be indicated.

The recommendation of a 50mm focal distance lens does not preclude the use of other lenses provided this choice is explained in the text of any assessment or presentation. Where a different format has been deployed, photographs taken with a 'standard' lens may be supplied in addition. It should be noted that what appears to be perspective change or distortion can occur on the periphery of single frame images taken with wide angle lenses.

Perspective

All photographs have a unique, correct viewing distance, i.e. the distance at which the perspective in the image correctly reconstructs the perspective seen from the point at which the photograph was taken. Use of a telephoto lens may be necessary to show detail that is too small to be illustrated easily with a standard lens. In reproducing such an image, information on the correct viewing distance to obtain the correct perspective should be provided. The horizontal field of view is usually of greater relevance to representation of rural and peri-urban landscapes; however the vertical field of view may be more important in urban landscapes where cones of visibility may be restricted, in which case other camera and lens formats may be more appropriate and informative.

Photomontage

Photomontages seek to imitate a photograph of the actual scene as modified by the insertion of the proposed development. They are subject to the same inherent limitations as photographs, for example only showing the scene as it appeared under the conditions when the image was captured. However, as a means of illustrating the potential effect of a future development, a properly constructed photomontage can serve as an extremely useful tool. Explanatory text should be provided to describe the procedure used to fit the rendered image to the underlying photographic view.

Composite images

Unless the situation is unusual, a single frame photograph based on an SLR/ 50mm focal length lens combination or digital equivalent is unlikely to convey the amount of visual information required to represent a proposed development and relevant context. An appropriate horizontal field of view for illustration will be usually be greater, and sometimes considerably greater, than the 'standard' horizontal field of view of 39/40 degrees offered by a single frame image using a 50mm focal length lens. In this case the careful 'stitching' together of images with a 30-50% overlap can provide a more acceptable representation of the effect of a development in the landscape.

Viewing the image

Visual representations should be printed or published digitally at an appropriate scale to be viewed comfortably at the correct viewing distance for the image. Guidance should be provided as to how the image should be viewed in order to best represent how the proposal would appear if constructed, such as the required viewing distance between the eye and the printed image, and whether it is a single frame or a composite panoramic image. In the case of panoramic images (not single frame images) it is recommended that either the image is curved so that peripheral parts of the image are viewed at the same intended viewing distance, or that a flat image is viewed by 'panning' across with the eye remaining at the recommended viewing distance. An indication of the correct viewing distance for single frame or composite images is particularly important to allow consistent comparison between different image formats provided from the same viewpoint. If practicable, 'before' and 'after' images should be presented on the same page and/or at the same scale to allow comparison.

Landscape Institute Technical Committee February 2009

Further reading

horner + maclellan and Envision (2006) *Visual representation of windfarms: good practice guidance*. Inverness: Scottish Natural Heritage. (SNH report no. FO3 AA 308/2)
Includes detailed technical appendices on photography for visual impact assessment.

Landscape Institute and IEMA (2002) *Guidelines for landscape and visual impact assessment*. London: Spon.

Gives guidance on visual topics, including computer-based assessment and presentation techniques and photomontage.

Mackinnon, J G. (2009) *Letter from Director and Chief Planner, Scottish Government, to Heads of Planning: Wind farm photographic visualisation, 20 January 2009*. Edinburgh: Scottish Government.
Recommendations for producing visualisations to be viewed by non-specialists.